



# RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 16: Ending April 20, 2019

Wisconsin Department of Health Services | Division of Public Health  
Bureau of Communicable Diseases | Communicable Diseases Epidemiology Section

[dhs.wi.gov/dph/bcd.htm](https://dhs.wi.gov/dph/bcd.htm) | [dhsdphbcd@dhs.wi.gov](mailto:dhsdphbcd@dhs.wi.gov)





# INFLUENZA LIKE ILLNESS (ILI) ACTIVITY

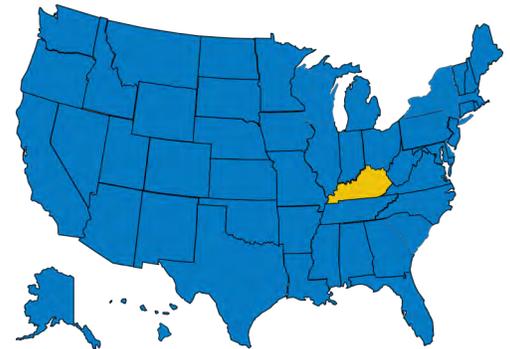
## STATE OF WISCONSIN



## REGION V OF US (WI, MN, IL, MI, OH, IN)



## UNITED STATES



● ILI: HIGH LEVELS   ● ILI: MODERATE LEVELS   ● ILI: BELOW BASELINE   ● ILI: INSUFFICIENT DATA

### AT-A-GLANCE:

■ [Weekly Respiratory Report Description](#)

■ **Predominant Virus of the Week:**

Influenza A/H3 is the predominant virus this week.

### INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

Week 16, 2019      October 1, 2018 to present

Wisconsin	1	3
Nationwide	5	96

### CURRENT ALERTS:

- Influenza activity is declining statewide.
- 130 flu-associated hospitalizations were reported this week.



For National US influenza surveillance statistics visit: [www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/)

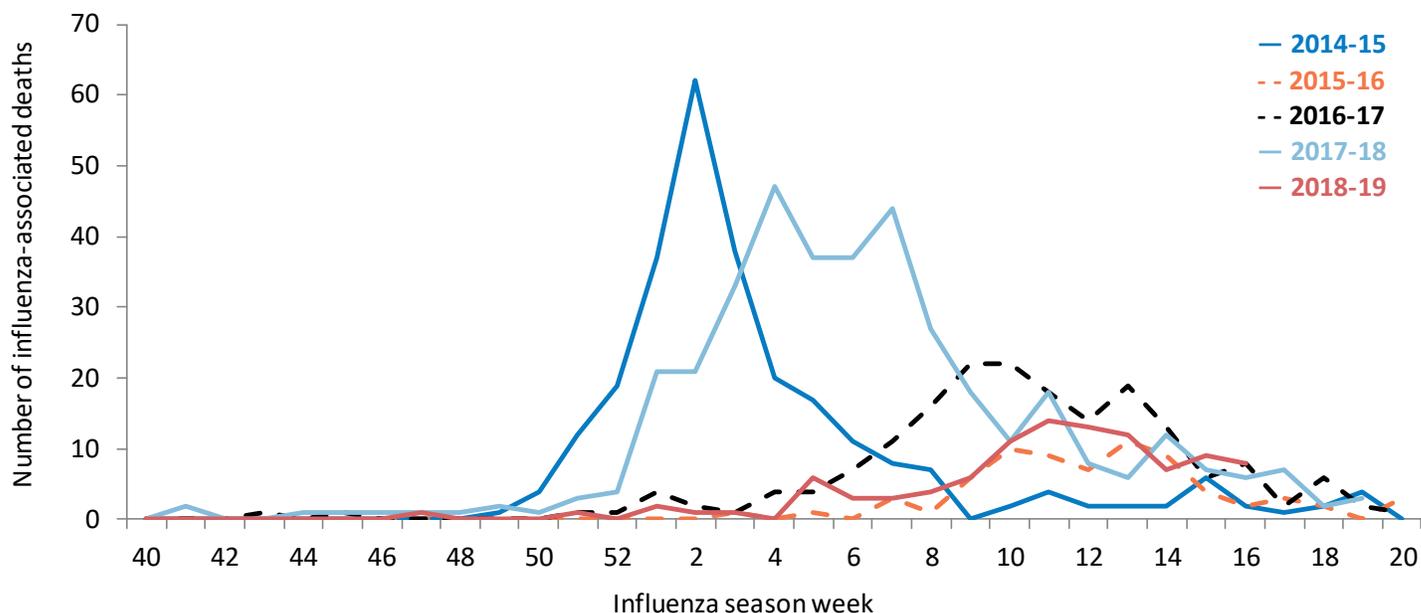




# INFLUENZA AND PNEUMONIA-ASSOCIATED MORTALITY

## Influenza and Pneumonia Deaths, Wisconsin

### Influenza-associated deaths by week and influenza season, Wisconsin



### Influenza and pneumonia-associated deaths by age group, 2018-2019 season

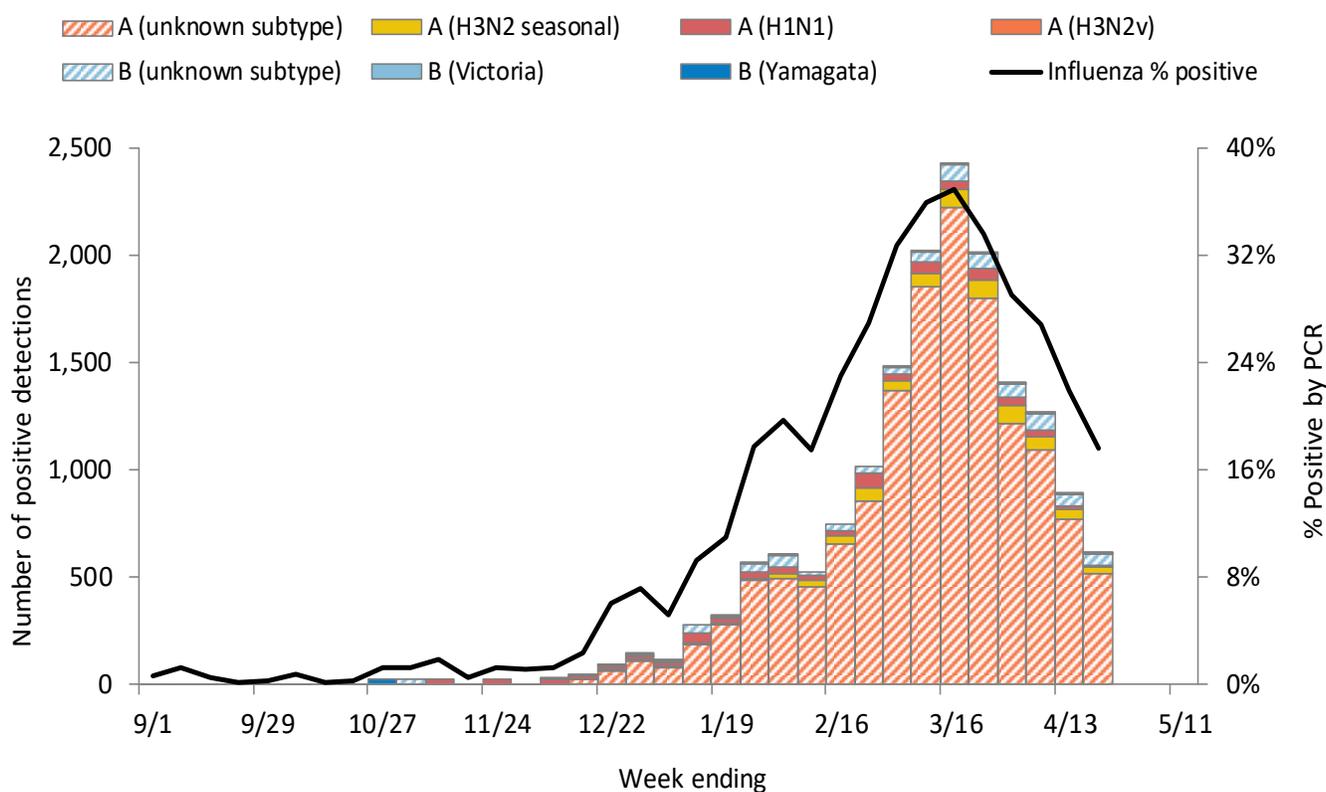
September 30, 2018 to April 20, 2019

Age group (years)	Week 16, 2019			Cumulative, 2018-2019 season		
	Influenza (I)	Pneumonia (P)	Percent I+P of all deaths	Influenza (I)	Pneumonia (P)	Percent I+P of all deaths
0-4	1	0	100.0%	3	5	2.2%
5-17	0	0	0.0%	0	3	3.0%
18-49	1	3	12.1%	12	73	3.7%
50-64	0	5	4.9%	20	229	4.6%
65+	6	49	8.2%	69	1589	5.9%
<b>All ages</b>	<b>8</b>	<b>57</b>	<b>7.9%</b>	<b>102</b>	<b>1899</b>	<b>5.5%</b>



# WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

## Wisconsin positive influenza results and subtypes by PCR

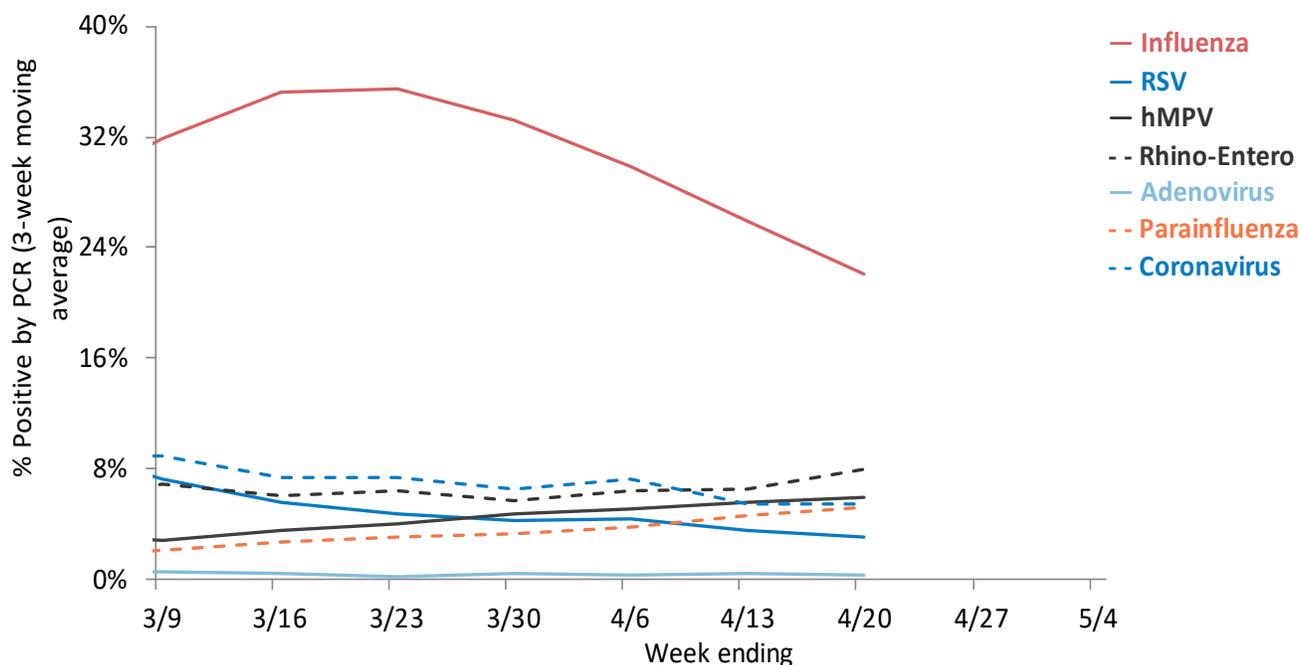


## Cumulative number of positive influenza PCR tests by subtype September 1, 2018 to present

	A (2009 H1N1)	Influenza A: 96%			Influenza B: 4%			Total
		A (H3N2)	A (Unknown)	B (Victoria)	B (Yamagata)	B (Unknown)		
Total positive (n)	630	704	14504	12	27	692	16569	
% of total positive	4%	4%	88%	0%	0%	4%	100%	

# WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Trends in respiratory virus activity by PCR



Week 16: Ending on April 20, 2019

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	3450	608	17.6%	28	14	512	1	2	51

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	723	39	5.4%	0	1	38	0

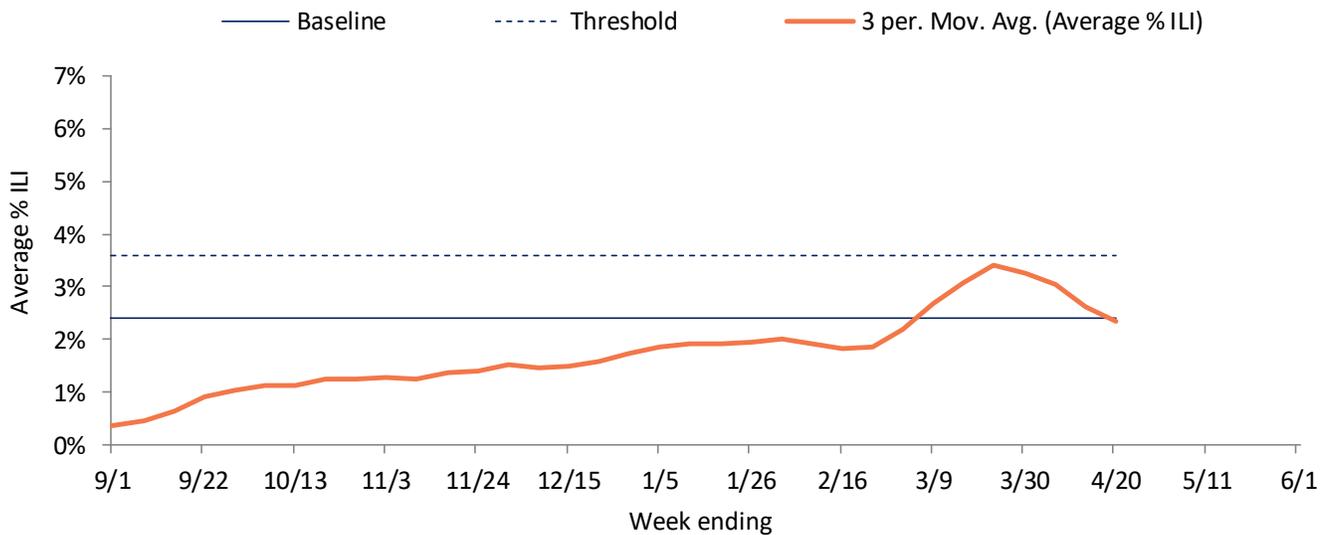
Respiratory virus	Tested	Positive (n)	Positive (%)	CoV 229E	CoV OC43	CoV NL63	CoV HKU1
Coronavirus (CoV)	393	20	5.1%	6	11	2	1

Respiratory virus	Tested	Positive (n)	Positive (%)
RSV	1297	22	1.7%
Human metapneumovirus	761	48	6.3%
Rhino-enterovirus	699	72	10.3%
Adenovirus	393	20	5.1%

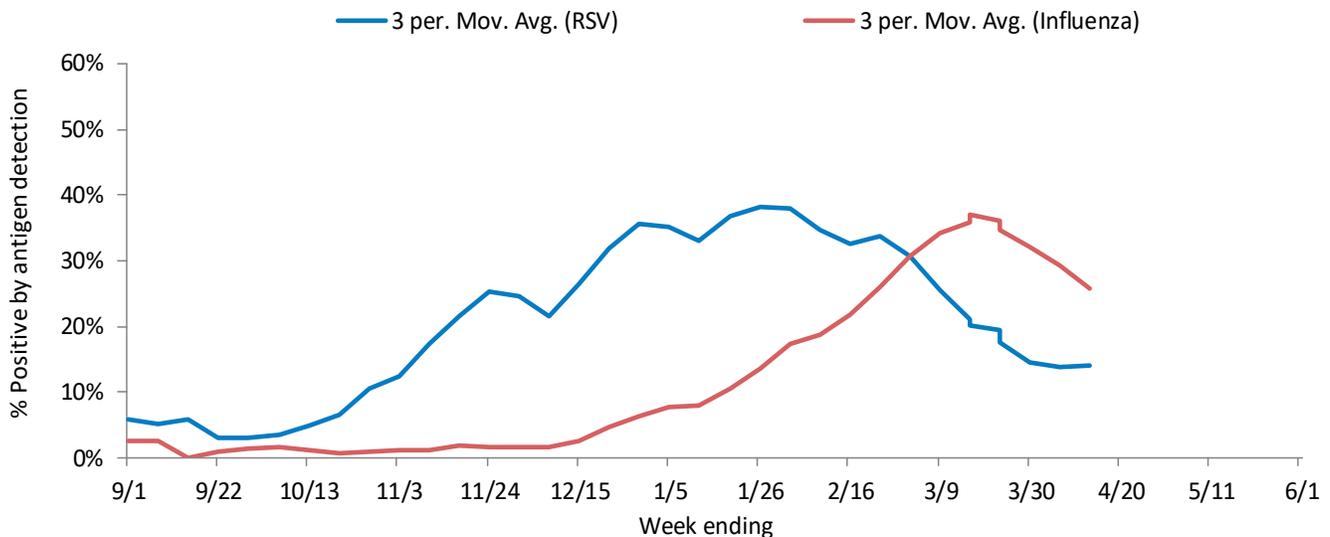
# WISCONSIN STATE SUMMARY

Influenza rapid antigen tests					RSV rapid antigen tests			Influenza-like illness (ILI)		
Tested	Positive (n)			% Positive	Tested	Positive (n)	% Positive	ILI %	Baseline	Threshold
	Influenza A	Influenza B	Total							
1473	233	30	263	17.9%	119	17	14.3%	2.0%	2.4%	3.6%

## ILI activity trend analysis

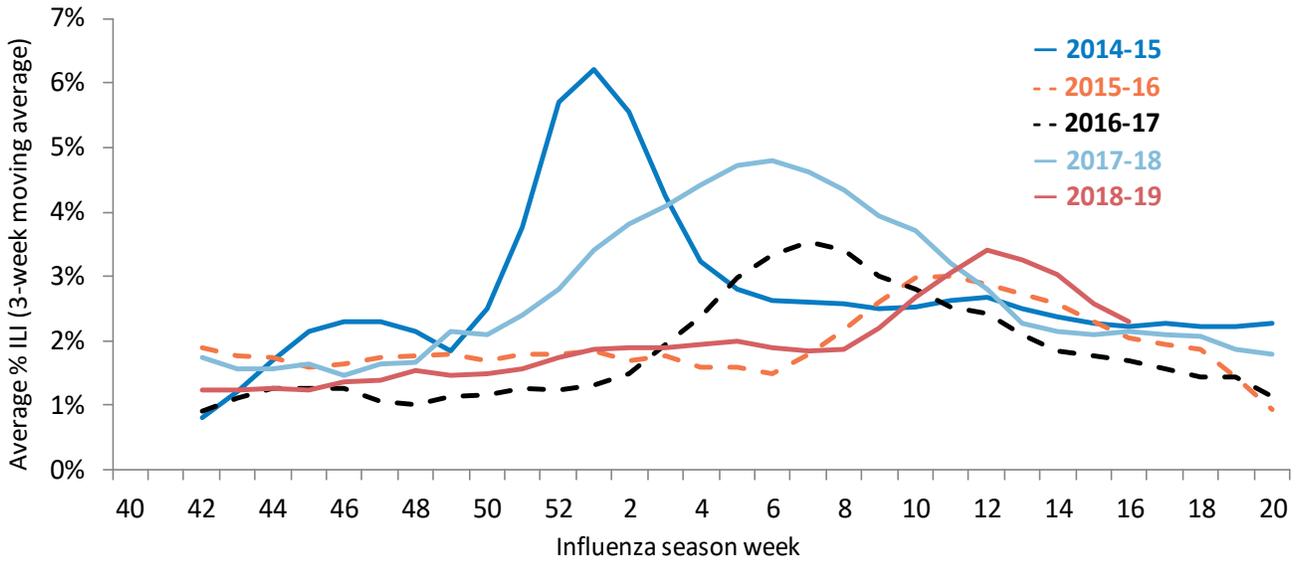


## Influenza and RSV trend analysis



# WISCONSIN STATE SUMMARY

## ILI activity trend analysis by influenza season, Wisconsin

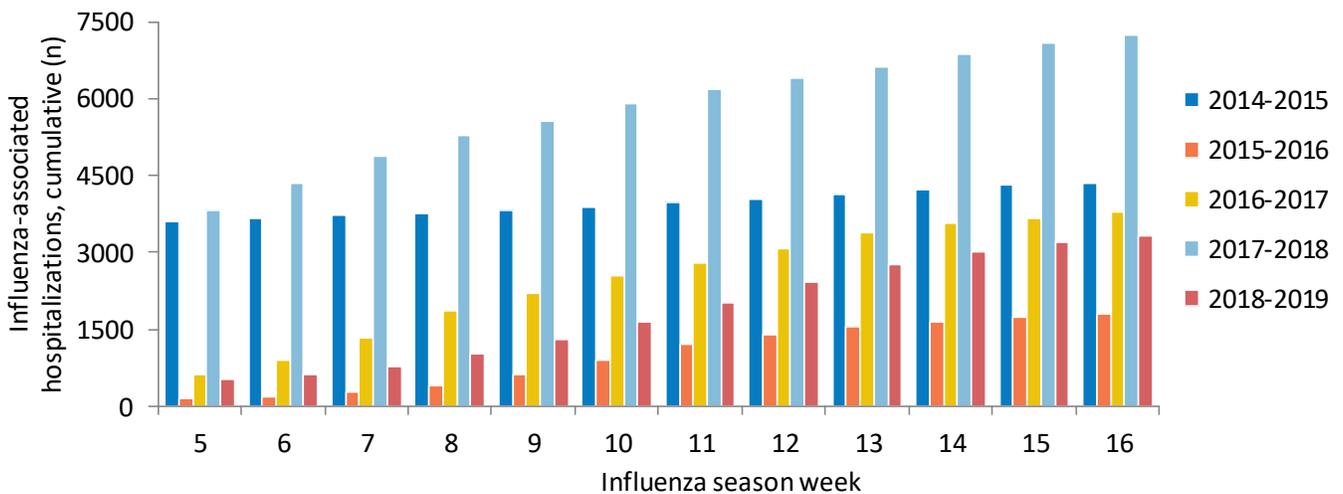


## Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System

September 1, 2018 to present

Age group (years)	Total reported (n)	Influenza subtype					Admitted to ICU	Required mechanical ventilation	Pregnant	Postpartum (≤6 weeks)
		A (2009 H1N1)	A (H3N2)	A (Unknown)	B	Not reported				
<1	49	5	0	40	2	2	8	4	0	0
1-4	96	3	3	77	4	9	16	4	0	0
5-17	110	2	3	85	5	15	18	2	0	0
18-49	510	44	19	392	24	31	103	36	34	3
50-64	835	92	46	638	31	28	182	51	0	0
65+	1723	128	139	1324	83	49	245	66	0	0
<b>Total</b>	<b>3323</b>	<b>274</b>	<b>210</b>	<b>2556</b>	<b>149</b>	<b>134</b>	<b>572</b>	<b>163</b>	<b>34</b>	<b>3</b>

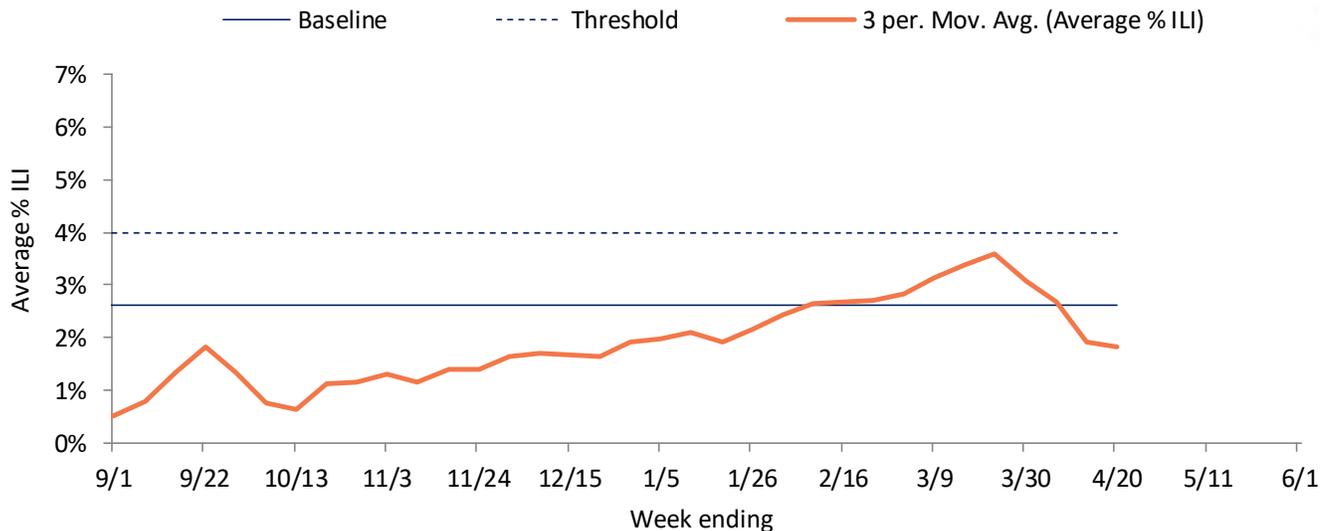
## Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



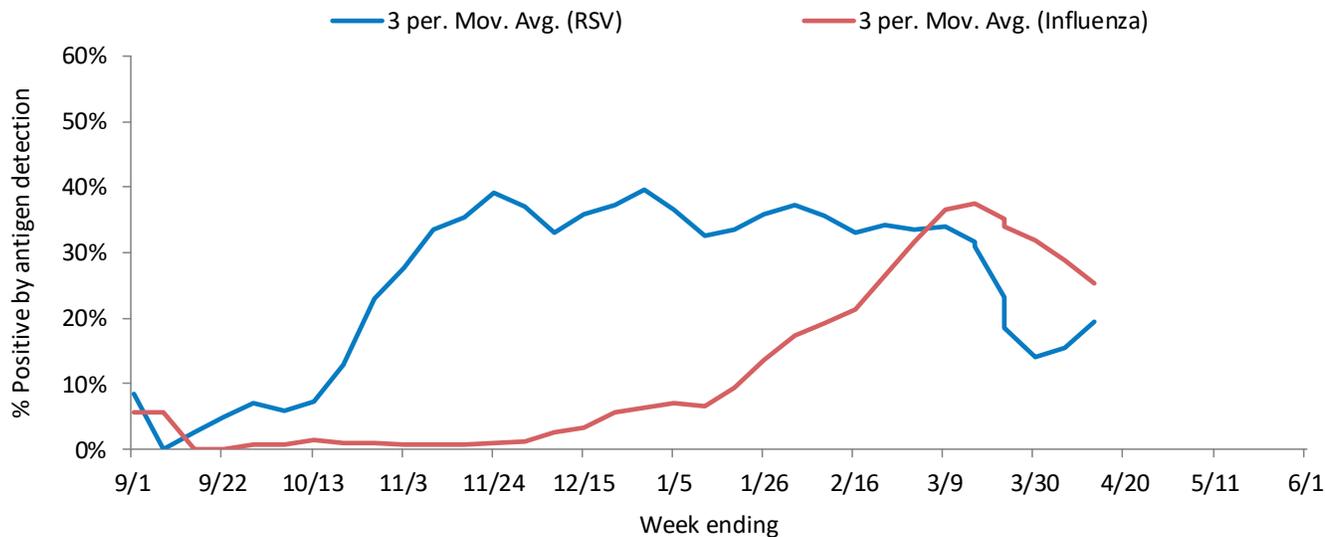
# NORTHEASTERN REGION

Influenza rapid antigen tests					RSV rapid antigen tests			Influenza-like illness (ILI)		
Tested	Positive (n)			% Positive	Tested	Positive (n)	% Positive	ILI %	Baseline	Threshold
	Influenza A	Influenza B	Total							
558	63	10	73	13.1%	76	13	17.1%	1.6%	2.6%	4.0%

## ILI activity trend analysis



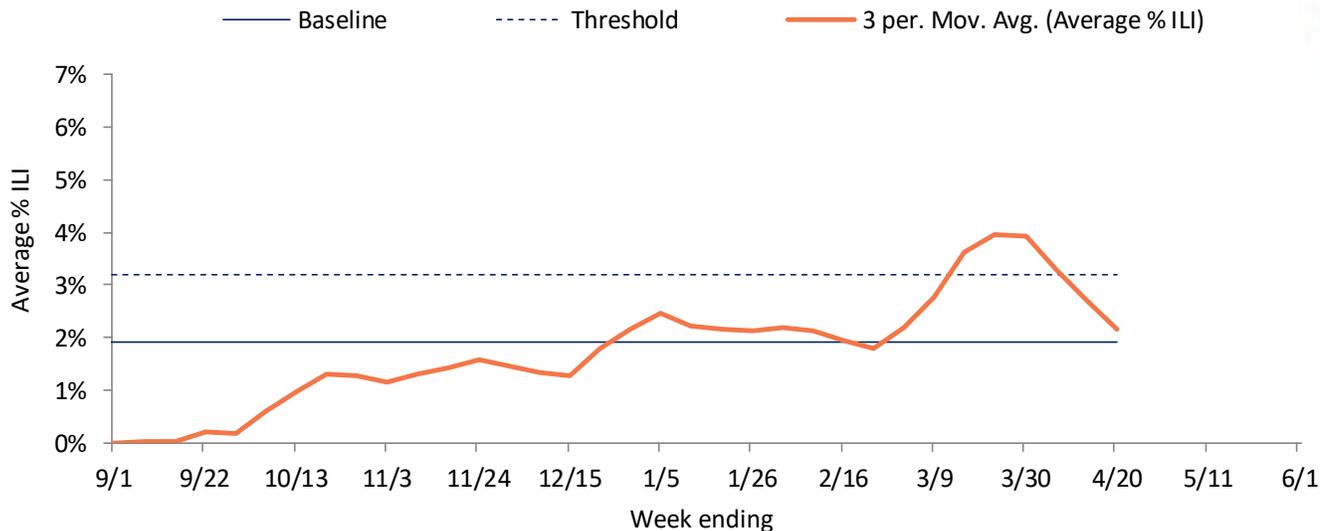
## Influenza and RSV trend analysis



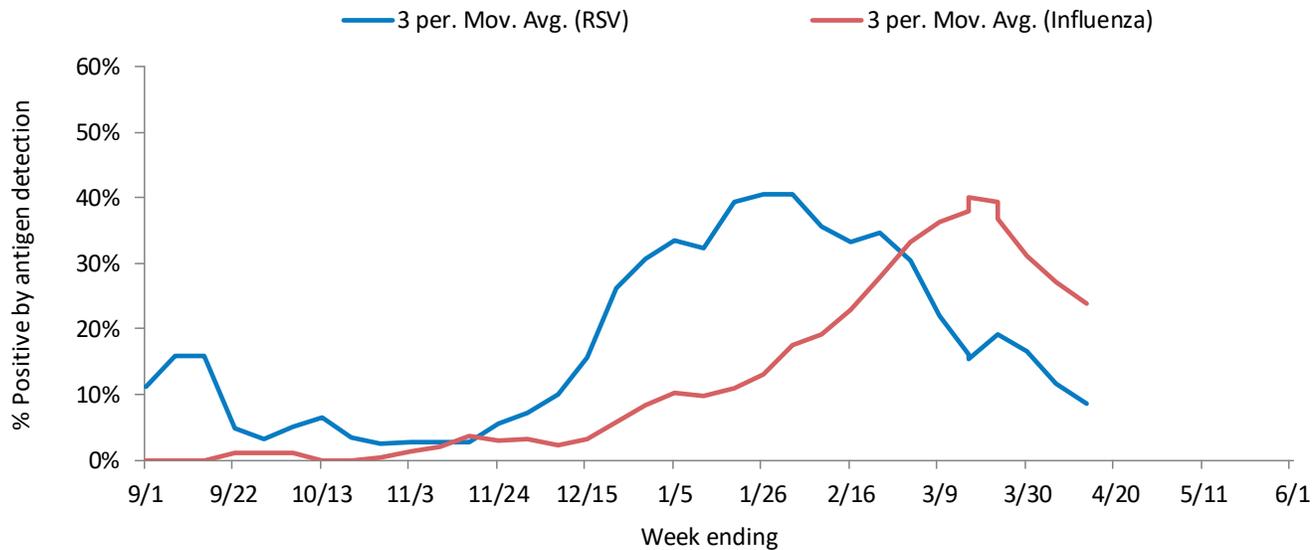
# NORTHWESTERN REGION

Influenza rapid antigen tests					RSV rapid antigen tests			Influenza-like illness (ILI)		
Tested	Positive (n)			% Positive	Tested	Positive (n)	% Positive	ILI %	Baseline	Threshold
	Influenza A	Influenza B	Total							
246	37	1	38	15.4%	31	4	12.9%	1.7%	1.9%	3.2%

## ILI activity trend analysis



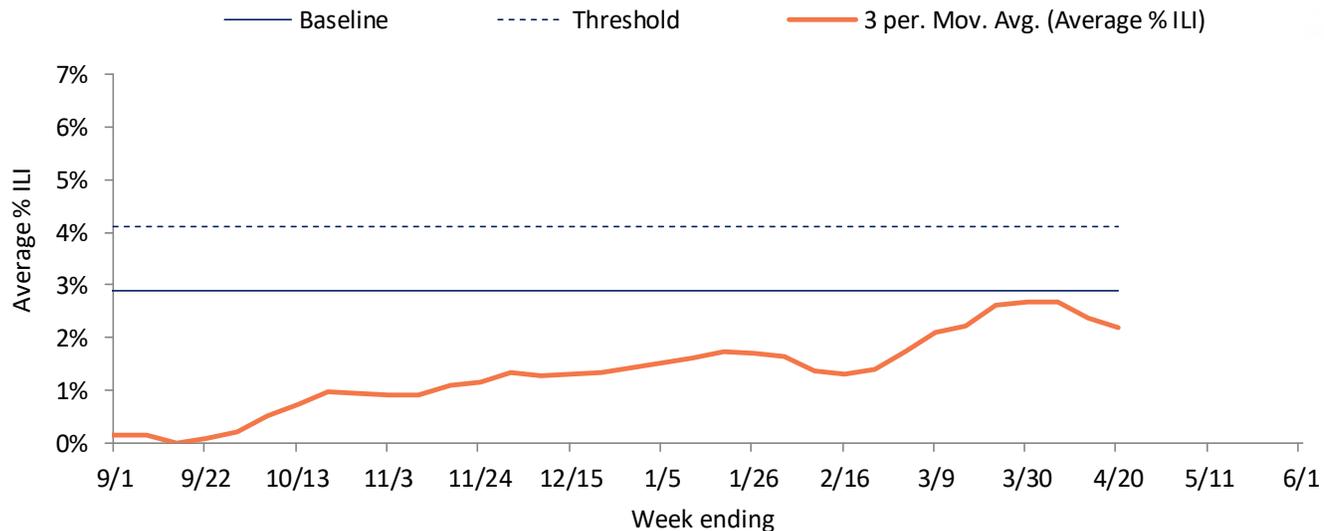
## Influenza and RSV trend analysis



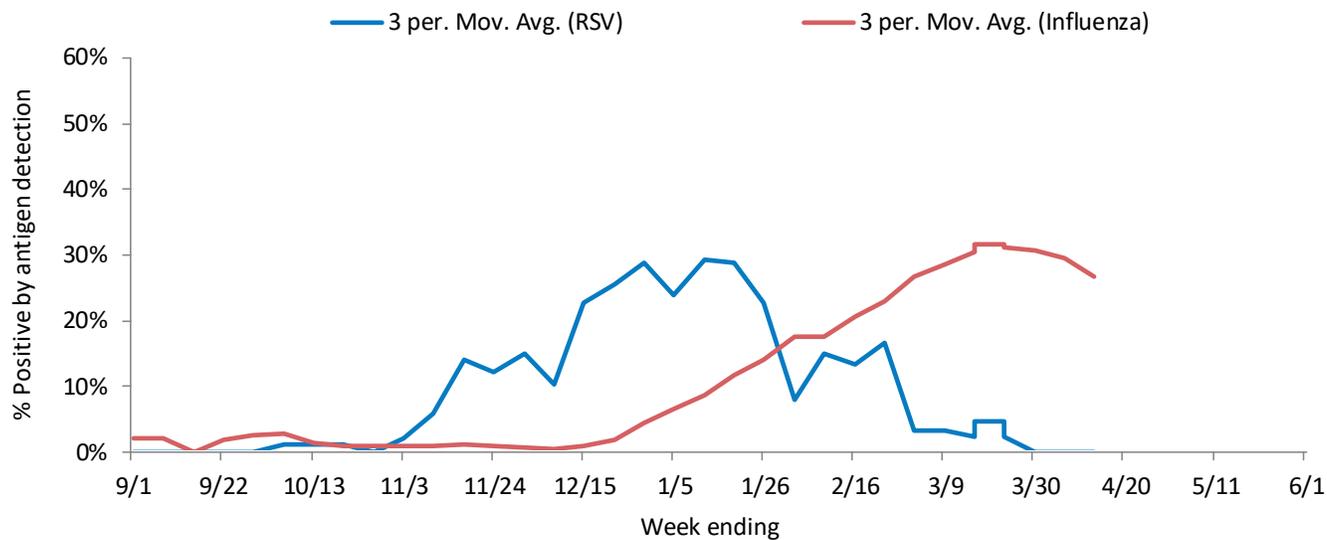
# SOUTHEASTERN REGION

Influenza rapid antigen tests					RSV rapid antigen tests			Influenza-like illness (ILI)		
Tested	Positive (n)			% Positive	Tested	Positive (n)	% Positive	ILI %	Baseline	Threshold
	Influenza A	Influenza B	Total							
598	112	18	130	21.7%	6	6	100.0%	2.0%	2.9%	4.1%

## ILI activity trend analysis



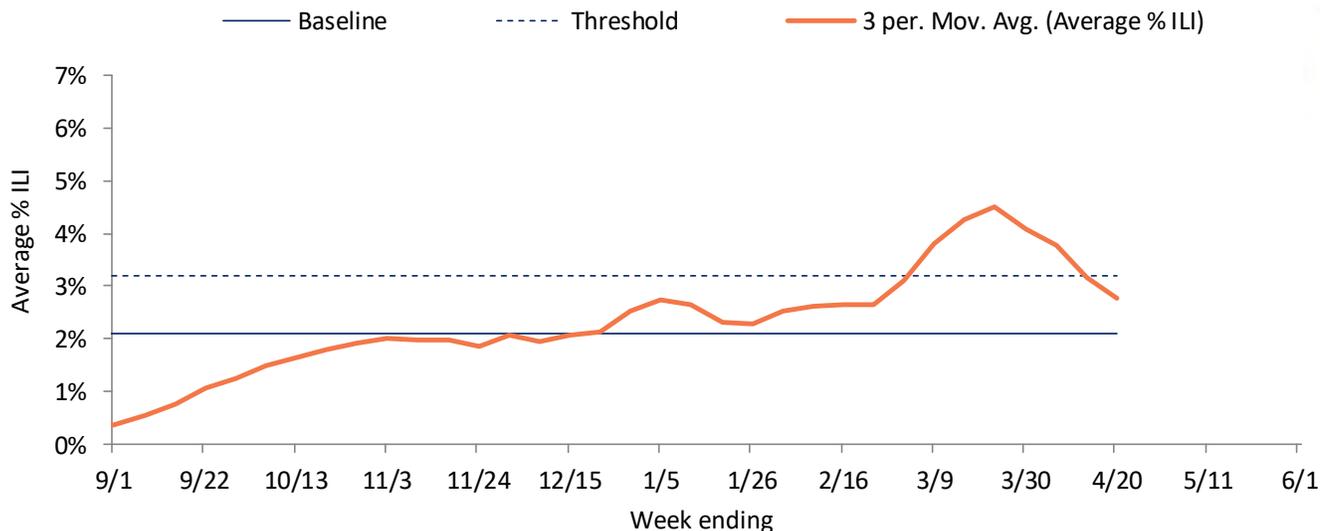
## Influenza and RSV trend analysis



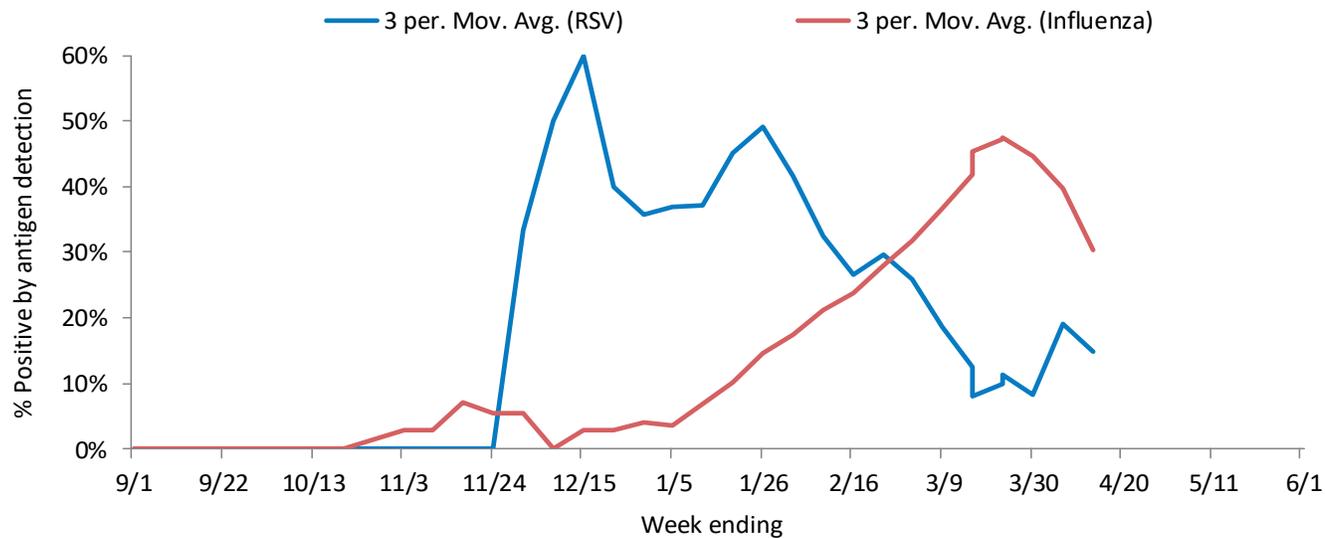
# SOUTHERN REGION

Influenza rapid antigen tests					RSV rapid antigen tests			Influenza-like illness (ILI)		
Tested	Positive (n)			% Positive	Tested	Positive (n)	% Positive	ILI %	Baseline	Threshold
	Influenza A	Influenza B	Total							
71	21	1	22	31.0%	6	0	0.0%	2.4%	2.1%	3.2%

## ILI activity trend analysis

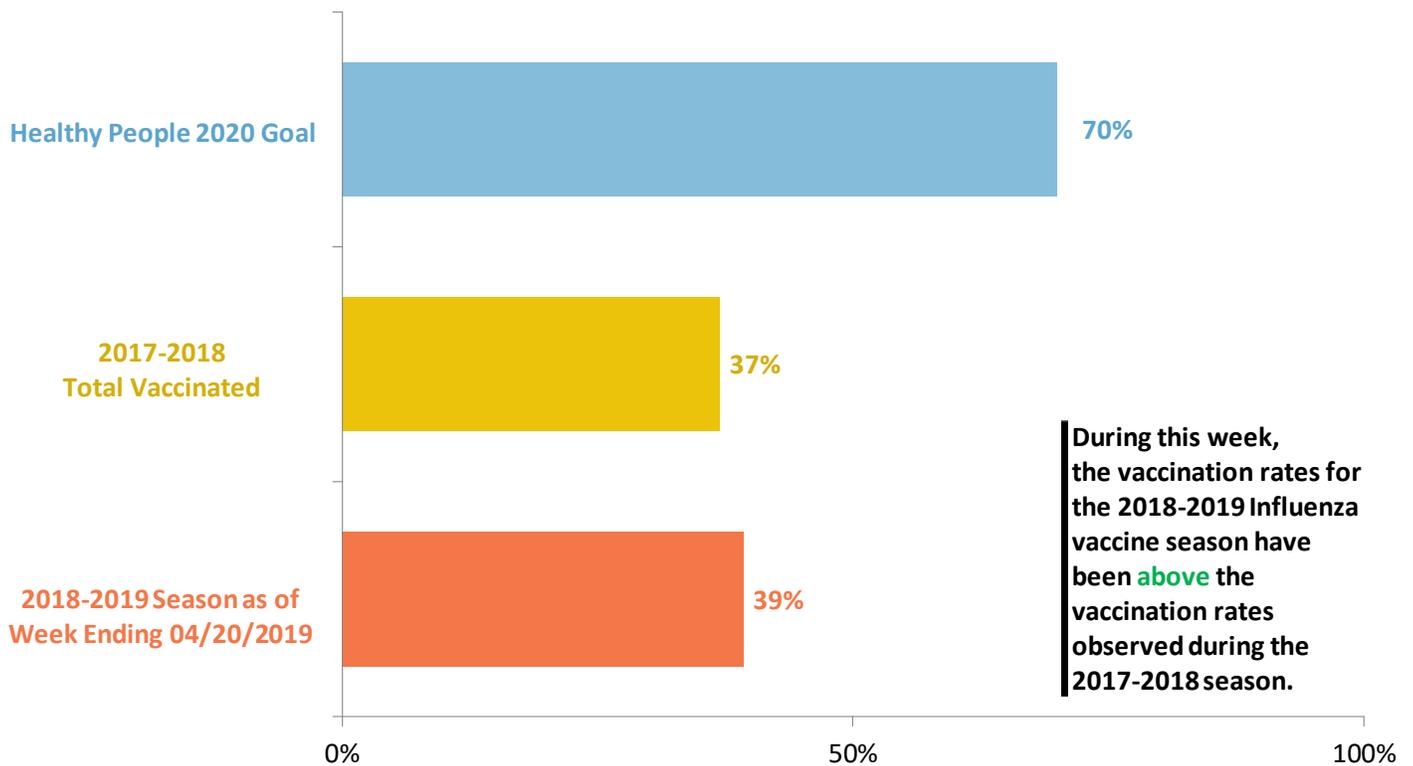


## Influenza and RSV trend analysis



# SEASONAL INFLUENZA VACCINATION

Cumulative percentage of Wisconsin residents who received 1 or more doses of influenza vaccine, 2018-2019 influenza season



During this week, the vaccination rates for the 2018-2019 influenza vaccine season have been **above** the vaccination rates observed during the 2017-2018 season.

Data source: All influenza vaccination rates presented were calculated using data from the Wisconsin Immunization Registry (numerator) and Wisconsin population estimates (denominator).

## Influenza vaccine composition 2018-2019:

The **trivalent** vaccines for use in the 2018-2019 influenza season contain the following:

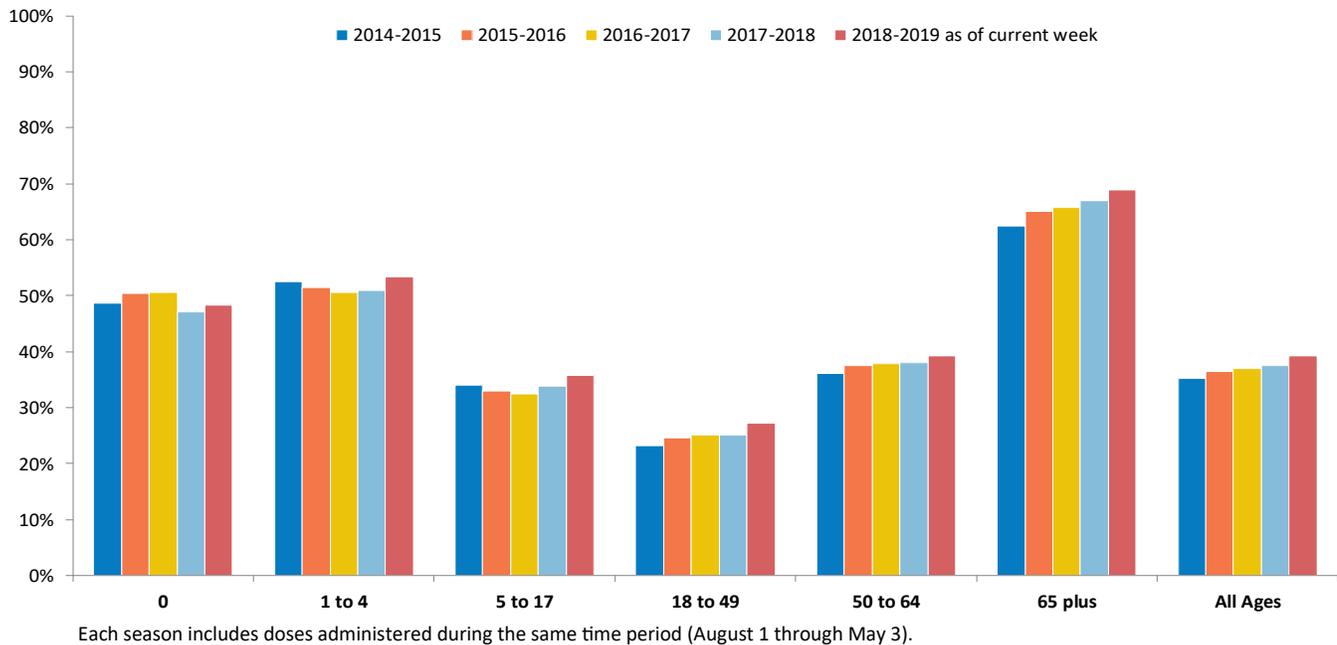
- A/Michigan/45/2015 (H1N1)pdm09-like virus
- A/Singapore/INFIMH-16-0019/2016 A(H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus (updated)

It is recommended that **quadrivalent** vaccines containing two influenza B viruses contain the above three viruses and:

- B/Phuket/3073/2013-like virus (B/Yamagata lineage)

# SEASONAL INFLUENZA VACCINATION

Percentage of Wisconsin residents who received one or more doses of influenza vaccine, by age group and influenza season



Percentage of Wisconsin residents who received one or more doses of influenza vaccine, by race and ethnicity and region, 2018-2019 influenza season

